



**Power  
Dialogue**

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# NESI:

## Progress Report and Outlook

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**REPORT**

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# NESI: Progress Report and Outlook

Tuesday 14  
June, 2022

6:00 pm –  
7:45 pm

Thought Pyramid Art Centre,  
18 Libreville Crescent Wuse II, Abuja



Number of Zoom  
Attendees:

**125**

Number of Views on  
Facebook:

**105**

Number of  
Physical  
Attendees:

**75**

## Panelists



**Engr. Aliyu Abubakar**  
Honourable Minister of Power,  
Federal Republic of Nigeria



**Shubham Chaudhuri**  
Country Director, The World  
Bank



**Ashish Khanna**  
Regional Director for  
Infrastructure, Africa West  
and East, The World Bank



**Narlene Egu**  
Senior Energy Advisor and  
Team Lead, USAID/Power  
Africa Nigeria

## Executive Summary

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The Nigeria Electricity Supply Industry faces several bottlenecks. However, the federal government (FGN) has also taken some critical actions to put the country on the path toward universal access. The FGN launched the Rural Electrification Strategy and Implementation Plan and the Nigeria Electrification Project to focus on underserved rural populations and rural institutions. The Rural Electrification Agency (REA) has since established the Rural Electrification Fund. The FGN also launched Presidential Power Initiative in 2018 to improve the power supply by 7GW in its first phase. The 70th Power Dialogue sought to discuss the key achievements of the sector and some of the industry's challenges.

The discourse also discussed the federal government's recent moves to enhance collaboration among several stakeholders. Stakeholders' recommendations include the need for improved collaboration among key actors in the sector and the need for increased private sector participation in the energy sector.

## Introduction

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The Nigerian electricity sector has not yet been able to meet the expectations of the Nigerian people. Over 80 million Nigerians currently do not have access to electricity. For those connected to the grid, inefficiencies and market challenges often mean insufficient supply. Other issues facing the sector include inconsistent tariff policy implementation and high, unsustainable losses in the distribution network. To tackle and solve these challenges, several programmes, including the Power Sector Recovery Programme (PSRP), have been initiated by the Federal Government of Nigeria (FGN).

Other efforts that the FGN has taken include the Rural Electrification Strategy and Implementation Plan and the implementation of the Nigeria Electrification Plan, which aims to improve electricity access for last-mile regions, especially unserved and underserved rural community dwellers and the institutions in these places. Also, the FGN launched, in partnership with the German government, the Presidential Power Initiative, which seeks to raise the consumed electricity from its current state to about 7 GW in its first implementation phase.

In collaboration with the efforts of the Nigerian government to improve power supply, the World Bank responded with a large and comprehensive portfolio of projects that provide support to the FGN programs – The Power Sector Recovery PforR (PSRO, US\$750m) supports the implementation of critical reforms included in the FGN's PSRP that aims to improve power sector policy and regulatory environment, enhancing its transparency, strengthening power sector's financial sustainability and reducing its fiscal risk. The Nigeria Electrification Project (NEP, US\$350m) supports expanding electricity access through off-grid solutions to remote rural communities using private sector financing models. The FGN has also unveiled an Energy Transition Plan that defines the country's pathway to net-zero. The plan includes revised policy measures for accelerating clean energy adoption as the country looks to meet its NDC targets.

The 70th Power Dialogue discussed the key achievements of the sector and some of the industry's challenges. In addition, the discourse highlighted the progress made and bottlenecks experienced in delivering energy access to Nigerians. The discussion also provided updates on the impact of sector policies and



interventions in the sector. The Bank is working toward supporting the country's Energy Transition Plan.

## Improving the Current State of Power Supply

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Infrastructural challenges have resulted in inefficiencies in the sector over the past decade. Despite the sector's privatisation in 2016, the power supply has not improved, with the average daily supply capacity still below 4GW. The current administration plans to solve this challenge. The Minister of Power, Engr. Aliyu Abubakar related some of the federal government's efforts to expand energy access in Nigeria. The government is increasing infrastructural development in the energy sector. The projects cut across the electricity value chain's generation, transmission and distribution segments. The World Bank is also supporting the federal government in implementing several initiatives to improve the operational capacity of the Nigeria Electricity Supply Industry.

## Improving Grid Supply

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Working towards improving transmission, the government announced the completion of the first phase of the Nigeria Transmission Expansion Programme (NTEP1). The programme is financed by the World Bank, the African Development Bank, and the Japan International Cooperation Agency. NTEP1, a part of the national Transmission Rehabilitation and Expansion Programme (TREP), aim to support the rehabilitation and upgrade of the country's transmission substations and lines.<sup>1</sup> The resulting objective is an increase in power transmission network and improved distribution capacity. NTEP1 is located in the

North West, South East and South-South regions cutting through the states of Kano, Kaduna, Delta, Edo, Anambra, Imo, and Abia States. The second phase (NTEP2) will focus on grid expansion.

The Presidential Power Initiative (PPI) – an initiative of the Nigerian government in collaboration with the government of Germany and Siemens – seeks to increase the generation capacity from 4,500MW to 25GW by 2025.<sup>2</sup> The first phase of the PPI focuses on critical and quick-win interventions to increase the system's end-to-end operational capacity to 7 GW. The second phase addresses bottlenecks in the distribution networks and enables maximal use of the existing generation and distribution networks. This phase is expected to bring the system's operational capacity to 11GW. The initiative's final third phase aims to attain a total operational grid capacity of 25GW in the long term. The implementing PPI team recently visited Germany to inspect the manufacturing and production process of ten mobile substations and transformers. The equipment is expected to be delivered in Q4 2022.

The World Bank also supports electrification efforts for improved socio-economic development in Nigeria. The World Bank had approved about US\$1.5 billion in new commitments to support the existing government initiatives for the power sector. In addition, the Bank is a key partner in implementing the Power Sector Recovery Programme (PSRP). The PSRP aims to improve supply reliability, achieve financial and fiscal sustainability and enhance accountability that unlocks access to private local and international financing.<sup>3</sup>

<sup>1</sup>Nigeria - Nigeria Transmission Expansion Project Phase 1 (Ntep1) - Project Appraisal Report, AfDB (2019), <https://www.afdb.org/en/documents/nigeria-nigeria-transmission-expansion-project-phase-1-ntep1-project-appraisal-report#:~:text=The%20Nigeria%20Transmission%20Expansion%20Project,transmission%20network%20and%20allow%20distribution.> (Assessed June 26, 2022)

<sup>2</sup>All About the Presidential Power Initiative, Siemens Energy. <https://www.siemens-energy.com/africa/en/company/about-us-africa/presidential-power-initiative.html>. (Assessed on June 26 2022)

<sup>3</sup>Power Sector Recovery Programme Factsheets

## Off-Grid Efforts

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While the government is working to improve access, it also plans to integrate clean energy into the country's mix. The government is currently negotiating and working with solar power developers for the development of 14 projects which will generate about 1GW of clean energy. However, given that clean energy integration into the grid is not possible at this time, the projects will be off-grid. Renewable energy projects will remain off-grid until the grid meets its baseload requirement.<sup>4</sup>

In addition to improving grid electricity supply, the government and the World Bank also collaborate on off-grid clean energy projects. The Bank supports the Nigeria Electrification Plan (NEP). The NEP is implemented by the Rural Electrification Agency (REA). The REA secured financing of about USD550 million from the World Bank and the African Development Bank and has connected over 11,000 people through off-grid solutions, including mini-grids and solar home systems (SHS). The federal government, through the Rural Electrification Agency (REA), is also implementing the Solar Power Naija and the Energising Economies Initiative (EEI) focus on improving SHS deployments and off-grid deployments for economic purposes. The World Bank is also a huge supporter of Nigeria's decarbonisation efforts. In addition, the Bank is working toward supporting the country's Energy Transition Plan.

## The Importance of Coordination, Collaboration and Partnerships

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In achieving universal energy access in Nigeria, there is a need for increased collaboration and coordination between sector actors and stakeholders. This will help to resolve some challenges that have hindered project implementation. For instance, improved

communication and community involvement in projects will reduce repeated vandalism on key transmission infrastructure and right-of-way issues that have hampered transmission network development.<sup>5</sup>

Meeting Nigeria's energy sector financial needs will require a market-driven approach. While the World Bank's Nigerian power sector engagement is one of the largest in the world, more private sector participation is needed to meet universal energy access targets. The country's private sector has to participate more as local financing is required to provide energy access solutions at the scale needed. However, for this to happen, there must be a concerted effort from the government to establish and implement a clear regulatory and policy environment. This is essential to drive private sector investment, create incentive mechanisms for stakeholders and ensure sector accountability. The effects are already visible in the off-grid space where the Nigeria Electrification Plan offers a huge opportunity for increased private sector participation. In addition, given the huge capacity needs of the energy sector, the private sector will also play a huge role in covering the skills gap.

## Conclusion

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The Nigerian electricity supply sector is plagued by challenges that have affected its capacity to meet the country's energy needs. The country is poised to solve not only to improve its power supply but also to lead in clean energy adoption in the region. Development partners, like the World Bank, have committed to and are currently financing projects to accelerate adequate electricity supply in Nigeria. These institutions have restated their commitment to support the country.

<sup>4</sup>World Bank, Minister of Power Discuss Power Sector Progress at TEH Power Dialogue, The Electricity Hub, <https://theelectricityhub.com/world-bank-minister-of-power-discuss-power-sector-progress-at-teh-power-dialogue/>. (Assessed on June 23 2022)

<sup>5</sup>Vandals destroy six power transmission towers of TCN in Delta, The Nation. 2019. <https://thenationonlineng.net/vandals-destroy-six-power-transmission-towers-of-tcn-in-delta/>. (Assessed on June 22, 2022)

In addition to the efforts made by development partners, the federal government is driving infrastructural development and interventions that will improve the power supply. However, the government and development partners cannot meet the financing requirements for Nigeria's electricity targets alone, hence the need for the government to create an enabling environment to promote private-led investments in the energy sector.

# Power Dialogue

